Identification and assessment of impaired strength and balance

Lower limb muscle strength and balance can be assessed and scored using two quick physical functioning assessments: the chair stand test and the four-test balance scale. Failure to complete either of these tests indicates deficits in strength and balance.
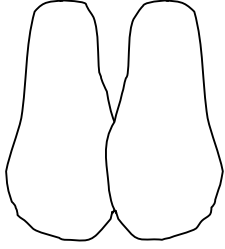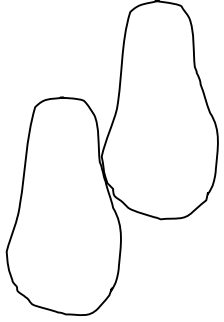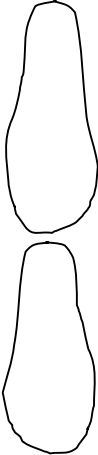
Chair stand test

- A straight-backed firm chair with no armrests should be used
- Place the chair with a wall behind for safety.
- Instruct the person to stand up and sit down as quickly as possible, five times with the arms folded.
- Using a stopwatch, record in seconds the time taken to stand up and sit down five times.
- Allow a maximum of 2 minutes to complete the test

Four-test balance scale

- The four-test balance scale includes four timed static balance tasks of increasing difficulty that are completed without assertive devices.
- No practices are allowed for any of the four tests and they should be carried out in bare feet.
- The person can be helped by the assessor each time to assume the position. The person should then indicate when she is ready to begin the test unaided.
- If the person cannot assume the position, the test is failed at that stage.
- Each position must be held for 10 seconds before the person progresses to the next level of difficulty.
- Timing is stopped if (1) the person moves their feet from the proper position, (2) the assessor provides contact to prevent a fall or (3) the person touches the wall with a hand.

The four-test balance

1. Feet together stand	2. Semi-tandem stand
• Hold for ten seconds	• The person chooses which foot is placed in front • Hold for 10 seconds
3. Tandem stand	4. One leg stand
• The person chooses which foot is placed in front • Hold for 10 seconds	• The person chooses which leg to stand on • Timing starts as soon as the person raises one foot off the ground • We chose to extend the maximum length of time of the one leg stand test from 10 seconds to 30 seconds to lessen the ceiling effects of the test.